

CLAIMS

1. A method for managing differing software configurations of a plurality of CE devices (10, 10a) communicate with a server (40) a network
5 wherein each CE device includes an identifier (18) identifying that device to the server; the server having access to storage means (46) storing configuration record (70) associated with the identified CE device (10); the configuration record (70) comprising data indicating the software currently installed on the identified CE device and optional software (78) available to that CE device,
10 said method comprising:
 selecting a plurality of software options (64, 66,68) for download to the CE device (10, 10a) at least partly by reference to the configuration record (70) associated with the device identifier;
 providing said software options to the device (10, 10a) for download
15 over the network (32);
 and updating the associated configuration record (70) for that device in dependence on the download of at least one of the software options by the CE device.
- 20 2. A method according to claim 1, wherein the device identifier (18) comprises information relating to CE device type (18a) and information (18b) uniquely identifying that device.
3. A method according to claim 2, wherein the selection of optional
25 software available for download to the CE device is determined partly by device type information (18a) in the identifier (18).
4. A method according to any preceding claim, wherein the
30 download of at least one of the software options by the CE device occurs automatically in response to an error status indicated by the CE device (10, 10a) to the server (40).

5. A method according to claim 4, wherein the software automatically downloaded in response to an error status (90) is selected according to determining criteria (98).

5 6. A method according to claim 5, wherein the determining criteria relate to the frequency of error status indications by the CE device, the frequency data (80) collected (96) by the server (40) which selects software in dependence on the configuration record (70) and this frequency data.

10 7. A method according to claim 6, wherein the selected software performs an automatic restore (99), an upgrade, or a roll back (108) of the software indicated within the configuration record.

8. A method according to claim 1, wherein the download of at least
15 one of the software options performs a software upgrade, a restore or a roll back in dependence on user input (26).

9. A method according to any preceding claim, wherein the configuration record (70) is stored in a database (46) comprising a plurality of
20 configuration records, each record being identified with a CE device (10, 10a).

10. A method according to claim 9, wherein the configuration records (70) comprise link data (72) referencing software download locations (48, 50).

25 11. A system for managing differing software configurations of a plurality of CE devices (10, 10a) operable to communicate with a server (40) over a network (32), wherein each CE device includes an identifier (18) for identifying that device to the server, the server having access to storage means (46, 52) storing a configuration record (70) associated with the
30 identified CE device (10), the configuration record comprising data indicating the software currently installed on that CE device and optional software (78) available to that CE device, and wherein said server comprises means (42) for

selecting software options for the CE device at least partly by reference to the configuration record, means (42, 30) for providing said software options to the device for download over the network (32), and updating means (42) for updating the configuration record (70) for the CE device in dependence on the
5 download of at least one of said software options by the CE device.

12. A system according to claim 11 wherein the software for download is stored (48, 50) remote to said server (40), the configuration record comprises link data (72) signifying the relevant remote storage location, and
10 wherein the providing means provides said link data to the CE device to enable download of software by the CE device.

13. A system according to claim 11, wherein the download of software by the CE device (10,10a) is initiated automatically by the server (40).
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14. A system according to claim 11 or claim 12, wherein the download of software by the CE device is initiated in response to user input (26) to the CE device.

20 15. A system according to claim 11, wherein the CE device comprises means (12) for detecting an internal error and means (30) for connecting to the server (40) in response to said detection and the server comprises determining means (42) which determine software for automatic download to the CE device according at least in part to error criteria (80) and
25 at least in part by reference to the software configuration record (70) for that CE device.

16. A CE device (10, 10a) for use with the system of claim 11, the device comprising ID memory means (14) for storing a device identifier (18),
30 storage means (16) for storing software, input means (24, 26) for receiving input and processing means (12) for processing said software, the device

being operable to receive downloads according to a configuration record (70) across a network (32).

17. A server (40) for use with the system of claim 11, comprising
5 storage means (46; 52) for storing a configuration record (70) for each identified CE device.

18. Program code which when executed on the system of claim 11
10 provides means for selecting software for download to a CE device (10, 10a) at least in part by reference to a configuration record (70) associated with the CE device, means for providing said software to the CE device for download over a network, and means for updating the configuration record for the CE device in dependence on the download of said software by the CE device.

15 19. Program code which when executed by processing means (12, 42) in a configuration management system cause the steps of any one of method claims 1 to 10 to be carried out.

20. A program code product wherein the program code according to
20 claim 18 or claim 19 is provided on a carrier.

21. A configuration record database (46, 52) for use with the system
of claim 11 comprising a plurality of configuration records (70), each of which records is associated with a CE device by means of an identifier (18) stored
25 within said CE device.

22. A database according to claim 21, wherein at least one
configuration record (70) associated with an identified CE device comprises data fields (72, 78) relating to software available for download to said identified
30 CE device.

23. A database according to claim 22, wherein the data fields comprise download location data (72) for the software.